ODS 540

OBSTRUCTION DATA SHEET

ODS 540
JOPLIN MUNICIPAL AIRPORT
JOPLIN, MISSOURI

DIGITIZED FROM

OC 540
SURVEYED NOVEMBER 1988
11TH EDITION

PREPARED AND DISTRIBUTED BY
THE NATIONAL OCEAN SERVICE
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OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)

2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).

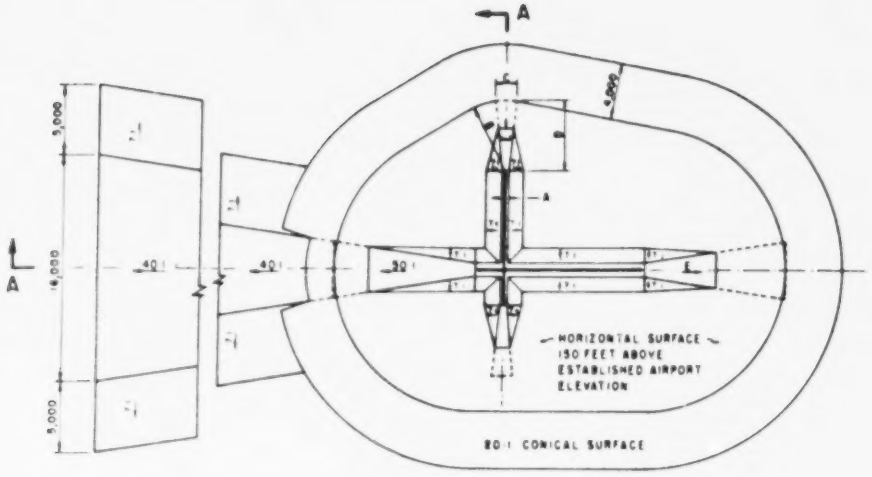
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

A(V) ..... Utility runway - visual approach only
A(NP) .... Utility runway - nonprecision instrument approach
B(V) ..... Nonutility runway - visual approach only
C .... Nonutility runway - nonprecision instrument approach with visibility minimums greater than 3/4 mile
D .... Nonutility runway - nonprecision instrument approach with visibility minimums as low as 3/4 mile
PIR ..... Precision instrument runway
SUPLC ... Supplemental C underlying a B(V)

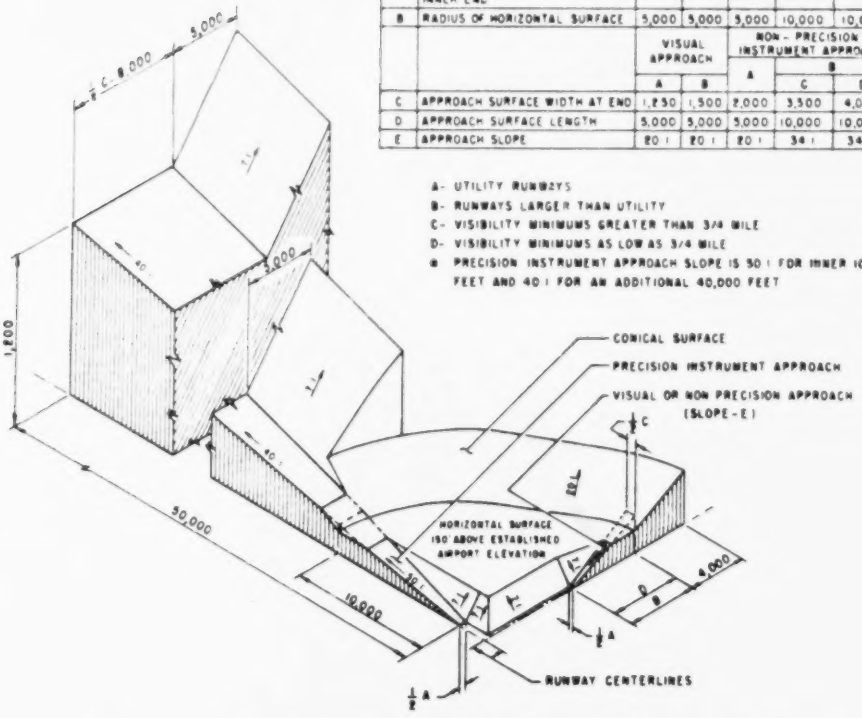
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B		
					C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	B		
					C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A- UTILITY RUNWAYS
B- RUNWAYS LARGER THAN UTILITY
C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

FAR-77 CIVIL AIRPORT IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

X[1] X[2] XXXX/XXXX[3] XXXXXX.XXX[4] XXXXXXX.XXX[4] XXXXXXX[5] XXXX/XXXX[6] XXXXXX.XXX[7] XXXXXXX.XXX[7]

OBJECT	LAT	LONG	A[8]	ELEV[9]	AGL[10]	HAR[11]	HAT[11]	HAA[11]	DEND[12]	DTHR[12]	DCLN[12]	PNTR[13]
XXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

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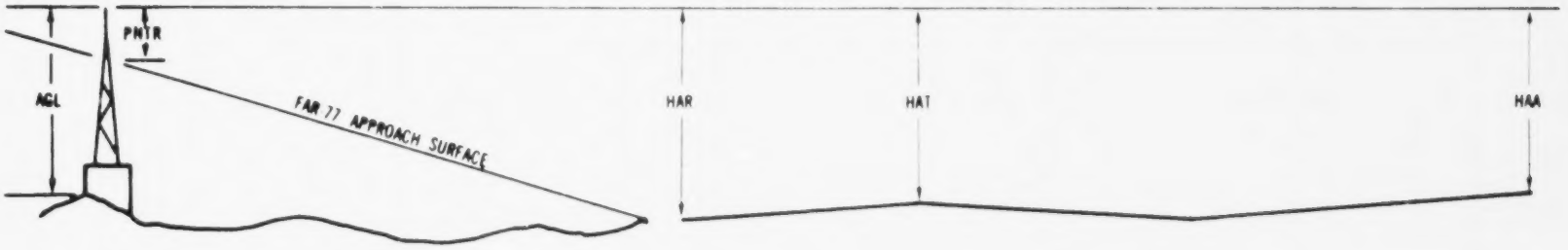

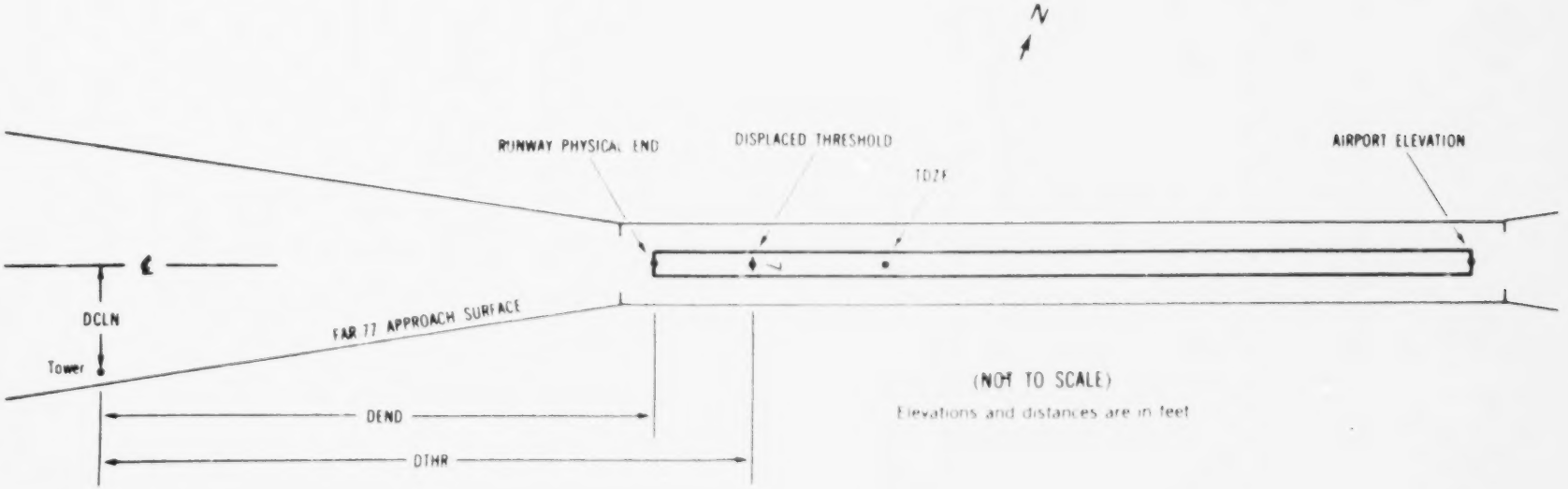

(NOT TO SCALE)

Elevations and distances are in feet

EXPLANATION OF FOOTNOTES

[1] Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary area of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.

[2] For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)

[3] Reference runway approach physical end elevation/touchdown zone elevation

[4] Latitude and longitude of reference runway approach physical end

[5] Reference runway geodetic azimuth reckoned clockwise from south

[6] Reference runway displaced threshold elevation/touchdown zone elevation

[7] Latitude and longitude of reference runway displaced threshold

[8] Accuracy Code:

Horizontal	Vertical
1 = 20	A = 2
2 = 40	B = 5
	C = 20

[9] Mean Sea Level (MSL) elevation at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.

[10] Height above ground level (AGL). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is ±10 feet.

[11] HAA - Height above airport
HAR - Height above reference runway approach physical end
HAT - Height above reference runway touchdown zone elevation

[12] DEND - Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end
DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway threshold
DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft.

A negative value for DEND or DTHR indicates object is in primary area on roll-out side of zero distance point.

[13] PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

OC0540

AIRPORT ELEVATION 981

4 A(V) 981/981 370837.274N 09430 3.130W 2302403

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
FENCE	370834.40	0943005.22	1A	986		5	5	5	316		116R	-1
TREE	370832.13	0943007.78	1A	1025		44	44	44	622		161R	23
TREE	370831.43	0943015.83	1A	1012		31	31	31	1169		200L	-17
TREE	370826.11	0943016.37	1A	1019		38	38	38	1546		187R	-29

22 A(V) 975/976 370859.985N 0942928.833W 0502423

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	370906.13	0942915.18	1A	1015		40	39	34	1248		225L	-12
TREE	370909.06	0942914.91	1A	1016		41	40	35	1453		11L	-22
TREE	370911.32	0942916.64	1A	1032		57	56	51	1491		255R	-8

AIRPORT ELEVATION 981

13 PIR 947/968 370927.942N 0943025.452W 3175751

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
BUSH	370842.13	0942926.67	1A	989		42	21	8	-6628		432L	13
WINDSOCK	370845.64	0942941.50	1A	981		34	13	0	-5560		222R	7
OL TRANSMISSOMETER	370911.55	0943000.28	1A	980		33	12	-1	-2595		403L	14
OL GLIDE SLOPE	370922.95	0943013.18	1A	998		51	30	17	-1040		400L	41
WINDSOCK	370919.80	0943020.11	1A	962		15	-6	-19	-901		230R	6
TREE	370932.42	0943041.57	1A	989		42	21	8	1210		666R	22
TREE	370941.30	0943030.82	1A	980		33	12	-1	1295		582L	11
TREE	370933.16	0943042.80	1A	992		45	24	11	1333		690R	22
TREE	370936.72	0943040.18	1A	974		27	6	-7	1458		291R	2
TREE	370941.43	0943053.96	1A	1000		53	32	19	2558		801R	6
TREE	370942.43	0943053.40	1A	1001		54	33	20	2603		699R	6
TREE	370947.78	0943050.52	1A	995		48	27	14	2849		164R	-5
	370944.35	0943056.99	1A	1003		56	35	22	2943		785R	1

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AIRPORT ELEVATION 981

31 D 976/977 370840.182N 0942931.672W 1375823

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
WINDSOCK	370919.80	0943020.11	1A	962		-14	-15	-19	-5602		230L	6
OL GLIDE SLOPE	370922.95	0943013.18	1A	998		22	21	17	-5463		400R	41
OL TRANSMISSOMETER	370911.55	0943000.28	1A	980		4	3	-1	-3908		403R	14
WINDSOCK	370845.64	0942941.50	1A	981		5	4	0	-943		222L	7
BUSH	370842.13	0942926.67	1A	989		13	12	8	125		432R	13
ROAD (N)	370831.76	0942931.50	1A	991		15	14	10	642		560L	2
TREE	370830.63	0942930.36	1A	1023		47	46	42	789		568L	30
ANTENNA ON BUILDING	370832.35	0942927.60	1A	991		15	14	10	809		285L	-3
OL ON LOCALIZER	370834.16	0942924.89	1A	977		1	0	-4	820		0R	-17
TREE	370830.54	0942929.51	1A	1017		41	40	36	841		523L	22
TREE	370836.10	0942916.42	1A	1017		41	40	36	1134		641R	14
ROAD (N)	370831.49	0942921.97	1A	989		13	12	8	1179		5L	-16
TREE	370829.25	0942924.53	1A	1008		32	31	27	1209		310L	2
TREE	370834.53	0942915.14	1A	1022		46	45	41	1321		612R	13
TREE	370830.30	0942919.85	1A	1008		32	31	27	1383		42R	-3
TREE	370826.47	0942925.00	1A	1021		45	44	40	1391		527L	10
TREE	370826.62	0942923.11	1A	1022		46	45	41	1483		403L	8
TREE	370826.97	0942915.96	1A	1031		55	54	50	1845		50R	7
TREE	370738.99	0942824.73	1A	1124		148	147	143	8226		116L	-88
TREE	370727.97	0942836.29	1A	1142		166	165	161	8428		1558L	-76

36 SUPLC 980/ 370835.717N 0942953.036W 1815815 979/979 370837.245N 0942952.970W

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
FENCE	370832.65	0942952.68	1A	990		10	12	9	309	464	39R	7
ROAD (N)	370832.45	0942953.12	1A	1002		22	24	21	331	486	4R	18

AIRPORT ELEVATION 981

18 SUPLC 968/9.1 370917.686N 0942951.232W 0015816

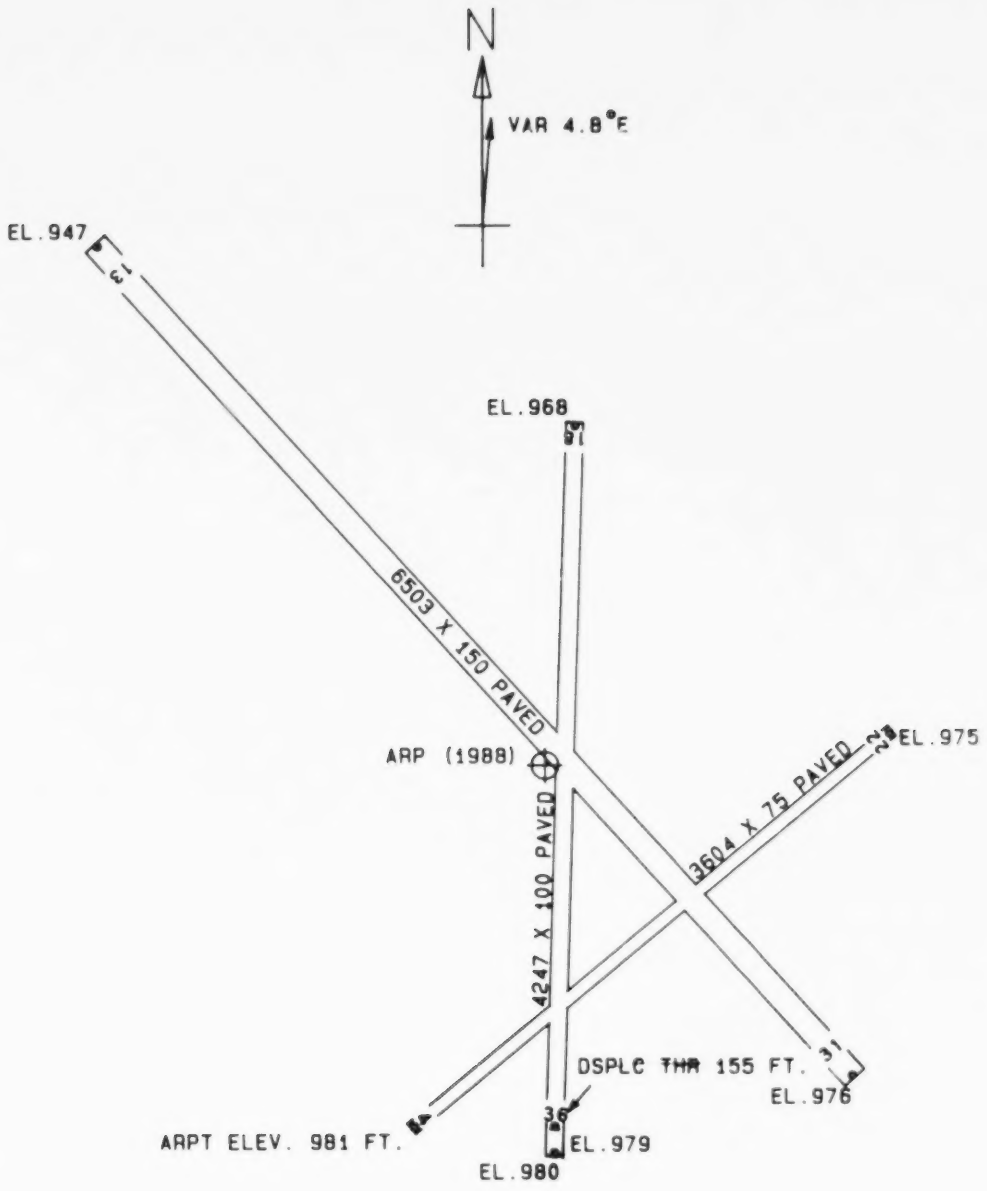
OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	370922.93	0942947.11	1A	991		23	20	10	542		315L	13
POLE	370924.20	0942947.04	1A	982		14	11	1	670		317L	0
TREE	370925.33	0942950.22	1A	984		16	13	3	776		55L	-1
TREE	370926.09	0942953.44	1A	986		18	15	5	843		208R	-1
TREE	370931.33	0942949.92	1A	1016		48	45	35	1383		59L	13
TREE	370932.10	0942946.96	1A	1015		47	44	34	1469		296L	10
TREE	370933.38	0942952.96	1A	1013		45	42	32	1581		194R	4
TREE	370933.99	0942956.24	1A	1020		52	49	39	1634		462R	10
TREE	370934.95	0942954.71	1A	1015		47	44	34	1735		341R	2
	370935.44	0942954.11	1A	1018		50	47	37	1786		294R	3

OC0540

AIRPORT ELEVATION 981

ARP 370858.010N 0942953.501W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
OL ON LIGHTED WINDSOCK	370852.89	0942956.58	1A	989		8	200 56	575
ANEMOMETER	370901.30	0942942.80	1A	993		12	64 12	928
ANTENNA ON OL CONTROL TR	370847.94	0943003.06	1A	1034		53	212 26	1279
OL ON AIRPORT BEACON	370847.88	0943004.46	1A	1027		46	216 6	1355
OL RTR TOWER	370908.40	0942938.81	1A	1026		45	43 45	1587
OL RTR TOWER	370907.62	0942937.88	1A	1026		45	47 40	1595
OL RTR TOWER	370908.41	0942937.79	1A	1026		45	45 37	1650
WINDSOCK	370841.41	0943000.55	1A	985		4	193 58	1773
TREE	370853.52	0942932.01	1A	1009		28	99 49	1798
TREE	370916.72	0942947.43	1A	980		-1	9 45	1955
TREE	370918.91	0942955.89	1A	998		17	349 59	2122
TREE	370918.94	0942946.83	1A	988		7	9 31	2185
TREE	370919.77	0942954.74	1A	978		-3	352 35	2203
ROD ON BUILDING	370843.47	0942924.65	1A	1015		34	117 23	2760
TREE	370834.19	0942935.04	1A	991		10	143 23	2835
TREE	370914.52	0943022.84	1A	999		18	300 19	2903
TREE	370918.26	0943024.64	1A	987		6	304 18	3248
TREE	370918.98	0943026.39	1A	988		7	303 44	3404
TREE	370828.90	0942930.79	1A	1032		51	143 13	3471
TREE	370928.01	0943037.74	1A	999		18	305 29	4694
TREE	370941.19	0943027.01	1A	987		6	323 21	5141
TREE	370931.46	0943041.58	1A	995		14	306 12	5157
TREE	370935.03	0943045.74	1A	993		12	306 43	5648
TREE	370937.34	0943049.72	1A	987		6	306 21	6045
OL WATER TANK	370729.52	0942845.15	1B	1129		148	143 28	10523
	370827.12	0942739.44	1B	1177		196	101 15	11296



TOUCHDOWN ZONE RUNWAY	ELEVATION
4	981
22	976
13	968
31	977
36	979
18	971

JOPLIN MUNICIPAL AIRPORT

JOPLIN, MISSOURI

(NOT TO SCALE)